PROTECT STORMWATER PITS

WHAT IS THIS?

As a last line of defence, stormwater pit protection (a Supplementary Sediment Control) protects the stormwater system from pollution, blockage, and accumulation of sediment and building debris. This control works by placing protection around or inside any stormwater pits on-site (private) and offsite (public). Such controls on public pits require consent from the council, state government, or the Crown (depending on who manages the road) and may require a traffic management plan. Stormwater pit protection is a last resort sediment control that should be used in conjunction with other drainage, erosion, and sediment controls and general site management.

WHAT DO I NEED TO DO?

Before starting site works:

- Identify any stormwater pits and drains on and below the site and show these on your approved ESCP (see page 17) with appropriate protection controls and maintenance requirements.
- Plan the layout of the site so that any wash-down areas, wash-out areas, and tile or brick cutting areas are not near stormwater pits (see page 64).
- Install these sediment controls before site work commences and include explanation of their function and maintenance in all site inductions.

Installing the controls:

Stormwater pit protection includes sediment fences, filter socks and stormwater pit traps. Those that collect sediment above the stormwater pit are easier to clean but have low storage capacity compared to controls that are installed inside stormwater pits. Place cones around controls in the gutters or on roads to prevent vehicles damaging them.

Sediment fence for stormwater pit protection: This is a sediment fence staked around the stormwater pit to trap coarse sediment. Fabric must be partially buried so that water and sediment does not flow underneath. The more space between the fence and the pit, the more chance of sediment settling and the greater the capacity of the trap (Figure 18). Only suitable for where pickets can be driven into the ground (see Sediment Fences, page 67). Ensure you have your Dial Before You Dig check for underground infrastructure before driving in pickets.

Figure 18: Construction details of a sediment fence for stormwater pit protection. *Figure from Landcom 2004 'Soils & Construction Volume 1 Managing Urban Stormwater (4th edition)'.*

Filter sock: This is a permeable synthetic sock, usually filled with sand, and placed in the pathway of runoff before it enters the pit. Sediment settles out with ponding up-slope of the sock (Figure 19). These can be used in many situations when secured carefully to avoid being dislodged, and require regular maintenance.

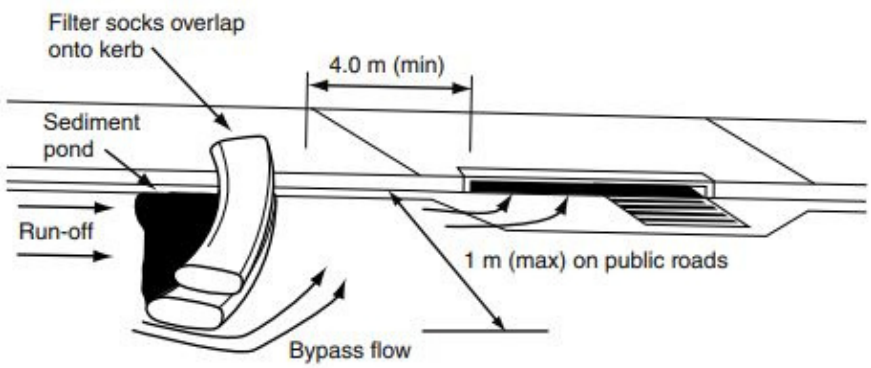
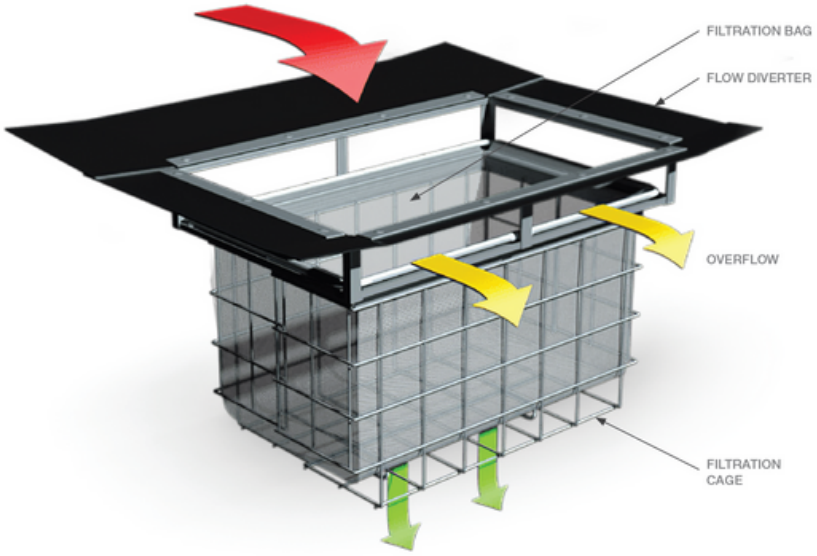


Figure 19: Correct placement of a filter sock to protect the stormwater system from sediment pollution. *Figure from Catchments and Creeks Pty Ltd.*

Stormwater pit traps: This is a basket, tray, bag, or screen placed just below the entrance of the stormwater pit. It captures coarse sediment, aggregates, and building debris before it enters the stormwater system. Fine mesh or fabric filters can be used to capture sediment. This control needs high frequency maintenance and may require traffic management. You must have consent from the relevant road authority to install this control. Not all pits are appropriate for this type of control.



Stormwater pit traps are designed to capture pollution before it runs into stormwater drains. This control is your last line of defence and must be vigilantly maintained.

Photo credit: oceanprotect.com.au

Maintaining the controls:

Inspect and clean stormwater pit protection arrangements prior to forecast rain and after rain events. This will significantly reduce maintenance time and costs. The built-up material can be re-used on-site (if not contaminated) or disposed of to landfill. Failure to maintain these controls will impact the stormwater system, increase flooding risk, and may lead to prosecution.